

## SYSTEM AND METHOD FOR TIMING REFERENCES FOR LINE INTERFACES

**ABSTRACT**

A system (10) and method are provided for phase aligning two timing signals when the timing signals are out of phase. The system (10) includes a selection unit (12) coupled to timing sources (14, 16), a detection means (18, 20) coupled to the selection unit (12) for detecting a failure and causing the selection unit (12) to switch to another timing source, and a unit coupled to the selection unit for phase comparing, wherein the unit introduces gradual phase alterations to the second timing signal until the first and second timing signals are in-phase. The method includes switching to a timing source to provide the time signal when a failure is detected in an existing timing source, comparing the phase of the timing signal to a second timing signal to determine the relative phases of the timing signals, and gradually phase shifting the second timing signal until the timing signals are in-phase